Public Workshop to Discuss Proposed Regulation for Energy Efficiency and Co-Benefits Audits for Large Industrial Facilities

June 9, 2009 - Sacramento

California Environmental Protection Agency



Air Resources Board

Overview

- Background
- Regulatory Concepts
- Next Steps
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Background

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California Global Warming Solutions Act of 2006 (AB 32)

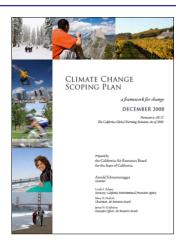
- Set the 2020 greenhouse gas (GHG) emissions reduction goals into law
- Directed the ARB to begin developing discrete early actions to reduce greenhouse gases
- Directed the ARB to prepare a Scoping Plan to identify how best to reach the 2020 limit



Background

AB 32 Scoping Plan

- Approved by the Board December 2008
- Outlines a comprehensive set of actions to reduce California's GHG emissions
- Proposes an energy efficiency and co-benefits audits measure



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Background

Scoping Plan's Energy Efficiency and Co-Benefits Audits Measure

- Set a facility threshold of 0.5 MMTCO₂E for inclusion in the measure
- Require facility "to conduct an energy efficiency audit... to determine the potential [GHG] reduction opportunities, including criteria air pollutants and toxic air contaminants."

Regulatory Concepts



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Regulatory Concepts Q&A



- Applicability
- Requirements
 - efficiency audit
 - assessment
- ♦ How results will be used
- Confidentiality
- Regulatory schedule

To whom will the regulation be applicable?

- Facilities in California emitting ≥ 0.5
 MMTCO₂E annually
 - based on 2009 reporting
- Also include
 - all refineries producing transportation fuels released into commerce
 - all cement plants

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Regulatory Concepts Q & A

Which industry sectors are impacted?

- 5 sectors:
 - power plants
 - refineries
 - oil & gas production/transmission facilities
 - cement and mineral plants
 - industrial gas production facilities (i.e., hydrogen plants)

What's the framework?

- The regulation will be a general guidance for facilities to conduct an energy efficiency audit and assessment
 - maintain consistency where possible without step-by-step instructions
 - allow site-specific variation where appropriate

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Regulatory Concepts Q & A

What will the proposed regulation require?

- ◆ Three elements:
 - energy efficiency audit to identify facility's energy consumers
 - assessment of energy use reduction opportunities and associated impacts
 - comprehensive report to ARB



Will the audits and assessments include only direct GHG sources?

 Include both direct (i.e., fuel combustion) and indirect (i.e., electricity consumption) stationary sources





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Regulatory Concepts Q & A

What is the purpose of the energy efficiency audit?

- Identify significant energy consumers (processes/equipment) within facility
- Focus the energy use reduction assessment on the largest energy consumers



What information will be required for the energy efficiency element?



- Overview of facility operations
 - process flow diagram
 - description of processes
 - equipment used in processes
- Data required:
 - energy consumption
 - associated production volume
 - directly emitted CO₂
- · Required for:
 - entire facility
 - processes/systems
 - equipment

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What if my facility has already conducted an audit?

 Results can be provided but must include the information required by the regulation



How will ARB ensure data consistency?

Specify data collection and submission requirements

- Require use of consistent emission factors where appropriate
- Specify time period for data collection



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Regulatory Concepts Q & A

Will the regulation have a de minimis allowance for equipment and/or processes?

- Considering different approaches for defining de minimis levels
 - may require identifying all processes/units but only including a subset in the audit and assessment
- Open to suggestions

What information will be required for the assessment element?

 Identify potential energy efficiency improvement options for each significant energy consumer

Examples:

- replacing older, less efficient process units
- recovering heat or electricity
- using renewable energy
- Evaluate impacts associated with implementation
 - costs
- impacts on health/safety
- time
- emissions impacts
- facility impacts
- (GHG, criteria pollutants, TACs)
- permitting impacts
- CEQA
- Can include ongoing and planned programs

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Regulatory Concepts Q & A

Who conducts the audit and prepares/submits report?

- May be either:
 - source (facility operator); or
 - third party



What will ARB do with the reports?

- ARB will summarize the findings for each sector in a public document
 - discuss feasible, cost-effective energy efficiency improvement opportunities
 - provide information to support decision making related to overall GHG program

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Regulatory Concepts Q & A

Will the completed audits and assessments be publicly available?

- ARB's report will summarize findings and append the individual facility reports
- Will include data as permitted by law
- Proprietary or "trade secret" information maintained confidential

What is the regulatory schedule?

- Draft regulation early July 2009
- Staff report early September 2009
- Board meeting October 2009
- Audit and assessment reports submitted early 2011
- ARB summary report mid-2011





Next Steps



- Next public workshop in July and/or August - draft regulation
- Workgroup meetings
- Board meeting October 2009

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